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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,050	10/21/2003	Hsin-Fa Yang	3079/191	3402

7590 06/23/2005  
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EXAMINER

CHANG, YEAN HSI

ART UNIT	PAPER NUMBER
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2835

DATE MAILED: 06/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/689,050

**Applicant(s)**

YANG, HSIN-FA

**Examiner**

Yean-Hsi Chang

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 5-9 is/are rejected.
- 7) ☒ Claim(s) 2-4 and 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 5 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jaggars et al. (US 6,259,601 B1).

Jaggars teaches an auxiliary cooling device (12, fig. 2) for a notebook computer (10), said device is for placing beneath said notebook computer (fig. 1) and is comprised of: a base (18) being a box (fig. 2) with an opening (area to receive lid plate 30) on an upper side thereof, and forming a receiving space therein, said base has at least one heat-sinking hole (42) in communication with outside, an upper lid (30) covering said upper side of said base, said upper lid has on an upper panel thereof an air-venting hole (32), and at least a fan (40) mounted in said base (claim 1); wherein said heat-sinking hole is provided on a rear one of side plates of said base (fig. 4), said fan is clung onto said heat-sinking hole for being locked upright (claim 5); and wherein said air-venting hole on said upper panel of said upper lid includes a lot of holes arranged in an array (shown in fig. 2) (claim 9).

Jaggers fails to teach an air-drawing end of said fan being located in said receiving space of said base, while an air-dissipating end of said fan facing outside said base via said heat-sinking hole. The fan 40 shown in fig. 4 of Jaggers is operated in a reversed direction. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Jaggers with a fan operated in a reversed direction, may also have the same cooling function, since the Examiner takes Official Notice that the cooling fan may be reversible and also performs approximately the same cooling function. If the Applicant chooses to properly challenge the fact that the cooling fan may be reversible, supportive document(s) will be provided upon request.

3. Claims 1 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lu (US 6,781,833 B2).

Lu teaches an auxiliary cooling device (10, fig. 3) for a notebook computer (fig. 4), said device is for placing beneath said notebook computer (fig. 4) and is comprised of: a base (1) being a box (fig. 2) with an opening (shown in fig. 3 not labeled) on an upper side thereof, and forming a receiving space therein, said base has at least one heat-sinking hole (12) in communication with outside, an upper lid (2) covering said upper side of said base, said upper lid has on an upper panel thereof an air-venting hole (21), and at least a fan (3) mounted in said base (claim 1); wherein said heat-sinking hole is provided on a bottom plate of said base (see fig. 5), said fan is laid flat and

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locked, said base is provided therebeneath with a plurality of supporting feet (81), when said fan is rotated, heat is dissipated upwardly via said air-dissipated end (claim 6).

Lu fails to teach an air-drawing end of said fan being located in said receiving space of said base, while an air-dissipating end of said fan facing outside said base via said heat-sinking hole. The fan 40 shown in fig. 4 of Lu is operated in a reversed direction. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Lu with a fan operated in a reversed direction, may also have the same cooling function, since the Examiner takes Official Notice that the cooling fan may be reversible and also performs approximately the same cooling function. If the Applicant chooses to properly challenge the fact that the cooling fan may be reversible, supportive document(s) will be provided upon request.

4. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lu in view of Shibasaki (US 20025/0080579 A1).

Lu discloses the claimed invention except the fan comprises a motor and a cylindrical air-dissipating vane wheel.

Shibasaki teaches a fan (23, fig. 2) of a cooling device (21, fig. 2), comprising a motor (38) and a cylindrical air-dissipating vane wheel (37) to generate a specific airflow distribution for increasing cooling efficiency.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Lu with the fan taught by Shibasaki for increasing cooling efficiency.

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5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jagers et al. in view of Unrein (US 6,437,979 B1).

Jagers discloses the claimed invention except the air-venting hole on said upper panel of said upper lid comprises a plurality of rectangular holes.

Unrein teaches an auxiliary cooling device (130A, fig. 11A) comprising a plurality of rectangular holes (135) on the upper panel (not labeled) of the device.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Jagers with the rectangular vent holes taught by Unrein for increasing venting efficiency since rectangular holes may have maximum effective area on a rectangular upper panel.

#### ***Allowable Subject Matter***

6. Claims 2-4 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter: The best prior art of record, Jagers et al. (US 6,259,601 B1), Lu (US 6,781,833 B2), Shibasaki (US 20025/0080579 A1), and Unrein (US 6,437,979 B1), taken alone or in combination fails to teach or fairly suggest an auxiliary cooling device for a notebook computer, comprising, in addition to the limitations cited in claim 1: two lateral side plates of four up-right peripheral side plates extending upwardly from a

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bottom plate of a base of the auxiliary cooling device, being provided on both rear end thereof with a pivot hole, and two side plates of an upper lid, each being provided on a rear end thereof with a pivot connecting-axle extending inwardly for connecting with said base as set forth in claim 2; and wherein said base is provided externally thereof with an electric plug for connecting to a power supply, and is provided therein with a transformer in connection with said fan, said two lateral ones of said side plates of said base are provided with a power switch and an indication lamp as set forth in claim 10, Claims 3-4 are dependent claims from claim 2.

### ***Correspondence***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yean-Hsi Chang whose telephone number is (571) 272-2038. The examiner can normally be reached on 07:30 - 16:00, Monday through Friday.


If attempts to reach the examiner by telephone are unsuccessful, the Art Unit phone number is (571) 272-2800, ext. 35. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306. Information regarding the status of an application may be obtained from the Patent Application Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system,

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see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-8558.

Yean-Hsi Chang  
Primary Examiner  
Art Unit: 2835  
June 21, 2005



**YEAN-HSI CHANG**  
**PRIMARY EXAMINER**